



# COMTECH™

Fluent in the Future™



## COMET

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The Comtech COMET (Compact Over-the-Horizon Mobile Expeditionary Terminal) has an operational configuration weight of only 55 lbs, allowing it to be airline checked, automobile transported, and carried into the field while retaining low commercial power requirements. Depending on terrain, the COMET is capable of establishing Line-of-Sight (LOS), Obstructed Line-of-Sight (OLOS), and Beyond Line-of-Sight (BLOS) links up to, and above, 60 km at data rates of 5 to 60 Mbps. Designed using the industry leading CS67PLUS troposcatter radio, the Comtech COMET can operate single stream from 946 kbps to 105 Mbps or dual stream from 1.9 to 210 Mbps (actual throughput based on terrain). Capable of augmenting existing communications with plug-and-play L2 connectivity and support of low-latency time-sensitive services. Inherent design characteristics decrease the probability of detection and intercept. With Comtech's standard 1 m antenna, the Comtech COMET can be setup by one person in as little as 15 minutes. The feature-rich Comtech COMET is interoperable with other Comtech tactical, mobile, and fixed Family of Systems (FoS) terminals, making it the ideal Beyond Line-of-Sight troposcatter system for Tactical Military, Disaster Recovery, and Emergency Restoral Communications applications anywhere in the world.

# COMET

### Key Features

- Optimized for throughput of 5 to 60 Mbps on links up to 60km (terrain dependent)
- Small Form Factor Troposcatter communications
- Layer2 IP interfaces ease network integration
- Direct Sequence Spread Spectrum (DSSS) to enhance signal reception
- Adaptive Coding and Modulation (ACM) to maximize average throughput
- Automatic Power Control (APC) to intelligently reduce transmit power when not required
- Easy-to-use Graphical User Interface provides local and remote monitoring and configuration using operator's smart phone or optional tablet
- Software-based Path Analysis Tool enables pre-deployment link planning (optional)
- 1 m lightweight carbon fiber antenna.



## Technical Specifications

Frequency Range	4.4 to 4.65 GHz and 4.75 to 5.0 GHz in 100 kHz increments
SSPA	10 watt GaN Amplifier
Data Interface	Two (2) RJ45 10/100/1000 Base-T Ethernet
Terminal Data Rate	Single Stream: 946 kbps to 105 Mbps (actual throughput based on terrain)
	Dual Stream: 1.9 to 210 Mbps (actual throughput based on terrain)
Modulation	BPSK, QPSK, 8 APSK, 16 APSK, 32 APSK, 64 APSK
Encryption	On board AES-256, FIPS 140-2 Validated
Diversity Order	Dual Frequency or Dual Polarization
	Single
Antenna	Max EIRP: 39.1 dBW
Monitor & Control	Comtech integrated web-based GUI
Engineering Orderwire	Modem GUI Chat
Built-in Test (BIT)	Full set of alarms and parameters monitored by user smart phone or optional tablet
Voltage	24VDC
Power Consumption	110 Watts

## Environmental

Operational Temperature	-30°C (-22°F) to 55°C (131°F)
Storage Temperature	-40°C (-40°F) to 60°C (140°F)
Humidity	Up to 100% condensing
Altitude	Operating: 10,000 ft (3,048 m) Transport: 40,000 ft (12,192 m)
Wind	15 mph (24 km/h) Sustained, 30 mph (48 km/h) Gusting

## Dimensions

Electronics Hub Case	25.0"W x 15.7"H x 19.5"D (63.5 cm W x 39.9 cm H x 49.5 cm D)
	59.4 lbs (26.9 kg)
Reflector/Tripod Case	24.7"W x 24.9"H x 14.2"D (62.7 cm W x 63.2 cm H x 36.1 cm D)
	56 lbs (25.4 kg)
Assembled	56 lbs (25.4 kg)

**Electronics Hub Case**



**Reflector/Tripod Case**



## About Us

Comtech Telecommunications Corp. is a leading global technology company providing terrestrial and wireless network solutions, next-generation 9-1-1 emergency services, satellite and space communications technologies, and cloud native solutions to commercial and government customers around the world. Our unique culture of innovation and employee empowerment unleashes a relentless passion for customer success. With multiple facilities located in technology corridors throughout the United States and the world, Comtech leverages its global presence, technology leadership and decades of experience to create the world's most innovative communications solutions.

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